FromTheSTAFF

W.T.F.D.A. Headquarters, P.O. Box 514, Buffalo, NY 14205

wINTER SKIP ASTONISHES MANY...Those who thought that midwinter E-skip activity hit an early peak were no doubt surprised and delighted by the many openings that took place in early January... apparently some of the best winter skip in memory for many TV DXers. Some of the openings reached into the FM broadcast band also. In fact, we've heard from some enthusiasts who rate some of the January catches among their best ever. Extraordinary lognings, such as a Montana channel 3 verified in the Toronto area, high MUFs in the early morning hours, low-power relays seen, and local stations being wiced out by short skio in the 600 to 700 mile ranne all have taken place in January. It was almost enough to make some lucky DXers forget about the record-breaking low temperatures also taking place during this extremely severe winter! Look for reports on this soon.

GOOD WINTER READING...Many of us are also mediumwave DXers, and are looking for better results. The National Radio Club sends word of two excellent manuals for effective AM broadcast hand homebrew antennas. Anartment dwellers will want to get a copy of their LOOP ANTENNA - DESIGN AND THEORY booklet. Also available: REVFRAGE AND LONG-WIRE ANTENNAS - DESIGN AND THEORY. Each one is only \$2.50 from: NRC Publications Center, P.O. Rox 164, Mannsville, NY 13661. If you are looking for DX during the winter VHF activity quiet periods, the AM broadcast band usually has it!

REGIONAL DX CLUB...Tom Yingling writes to tell us of a regional PX club he's active in. It's the Central Maryland DX Association, a Baltimore area club which covers all bands. Monthly meetings and DXD productions olus a regular bulletin, THE DX GRAM, are offered by the club. Membership in CMDXA isn't just for central Maryland however. If you'd like a sample bulletin send a self-addressed stamped envelope (SASE) (business size, with 37¢ nostage) to the CENTPAL MARYLAND DX ASSOCIATION - 6508 EREPLE DRIVE - APARTMENT 101 - BALTIMORE, MD 21215.

CONVENTION(S) 1984...Now's a great time to think summer (it might even help keep you warm, hi!). Summer is the time for DX conventions, and we'd like to recommend two that you'll want to visit. First, this year's AMARC convention will be held in Toronto, and shouldn't be missed; Toronto is truly one of the world's great cities. Secondly, your own club's convention shouldn't be missed either. Plan to be in Jamestown NY August 4th to 6th this year for the event. Look for more details on both conventions in upcoming issues.



Alen Hyams 9.0. Box 130 City Island Station Bronx.SY 10464

Steve 3 rachman writes in with a suggestion that should be of direct interest to all New York area DXers, and of possible interest to DXers everywhere. Steve has often wondered why an area with many DXers, like New York, does not have a regional DX association. He'd like to see the formation of a group that would bring DXers within a short distance of each other into closer contact. He'd like to hear from anyone interested in this idea, and anyone who may want to help start such a club in New York. I'd recommend that anyone interested in this idea should consult the WTFDA membership listings, published last issue.

For the more immediate future, Steve has another idea. He'd like to set up an informal DX get-together for New York area WTFDA members. As he puts it, "more of a coffee clutch or weekend backyard Bar-B-Q type of deal." Again, Steve asks that anybody interested blease contact him.

"Another one of my hobbies is DXing."

"DXing? What's that?"

"well... I listen on the radio or watch the T.V. for distant stations. You know, for example a T.V. station 400 miles away...you get the idea?"

"Yeah. But why?"

The above conversation was fabricated, yet it may seem familiar to many of you. Certainly it does to me. It's been but in the Mailbox page to pose to you two questions:

Why do you DX?

What do neople say when you tell them about your hobbie?

This should give everyone something to think about, and ho efully something to write about.

May new additions grace your log book,

World of Radio schedule from last month. The sunday,3:00 as C.S.T. show can be heard on 11.965 shz. On

AT

show can be heard on 11.965 whz. On march 3, however, a completely new schedule will go into effect.





W33300 FM 101.5

Donald L. Blevins 1657 Essextowne Circle Baltimore, MD 21221 phone: 301-391-3408

This month: Loggings from Hank Holbrook of Chevy Chase, MD Hank Holbrook 7211 Chestnut Street Chevy Chase MD 20815 reports:

•			•	-
<u>2/14/83</u>	N???	132.02	Washington, DC	Ransome Airlines 945
<u>3/13/83</u>	CGQBJ	132.02	Unknown	Quebecair 778
<u>5/11/83</u>	N930ML	134.0	Fort Wayne, IN	Midway Airlines Inc.
<u>5/17/83</u> 1136	N300A	132.02	Washington, DC	ICI Americas, Inc.
<u>5/29/83</u> 1914	WXS 9209	157.3	Benson Point,MD	AIRIES
6/12/83	KZA 868	156.80	Tilghman,MD	Knapps Narrows Bridge
6/20/83 1908 1908	WYC 2835 WYC 2835	156.80 156.525	Miles River, MD Miles River, MD	SEA LION SEA LION
6/23/83	NMY 52	157.10	Sandy Hook, NJ	Coast Guard
<u>6/26/83</u> 0210	WYR 7716	157.30	St. Micheals, MD	COURANTE
<u>7/29/83</u> 1635	WR V 6504	156.80	Miles River, MD	FRELDOM
<u>7/31/83</u> 1408	WYQ 4443	156.80	Rose Haven, MD	BLUE MAX
8/1/83 1716 1716	WYR 6216 WZX 6242	156.525 156.525	Herring River, MD Herring River, MD	RIEGEL DIXIE CUP
8/2/83 1007	WYQ 3452	157.30	Annapolis, MD	HOBBIT
<u>8/3/83</u> 1034 1034 1142	CG 1471 CG 1471 ELBF2	156.80 157.15 157.30	Chesapeake Bay, MD Chesapeake Bay, MD Annapolis, MD	US Coast Guard Aircraft US Coast Guard Aircraft BUDI
<u>8/5/83</u> 1353	WLI 65303	157.15	Chesapeake Bay, MD	US Coast Guard Cutter
8/6/83 1458 1458 2150 2150	WY 5918 WY 5918 WV 6713 WV 6713	156.80 156.425 156.80 156.425	Chesapeake Bay, MD Chesapeake Bay, MD Rose Haven, MD Rose Haven, MD	KASSIE B II KASSIE B II LIMERICK LIMERICK
<u>8/10/83</u> 1801	N124AV	132.00	Patuxent, MD cont'd:	Air Virginia
			u	

<u>8/11/83</u> 1241 1847 1857	N88DH WkV 2005 WYQ 9131	157.40	(location unknown)				
<u>9/3/83</u> 2051 2051	WJ 3487 WJ 3487		Rose Haven, MD	BETA BETA			
9/4/83 1717	WRX 5847	156.80	Chesapeake Beach, M	ED SEA SCAMP			
<u>9/5/83</u> 0741	WRS 2863	157.8	Knapps Narrows, MD	TRADE WINDS			
9/30/83	N18X	13202	Allentown, PA	Joy Manufacturing Co			
11/6/83 1750	N199GA	132.02	Charleston, %V	Hormel Company			
11/9/83 0037	N204C	132.02	Washington, DC	Conoco Inc			
<u>11/15/83</u> 1258	N250RA	15202	Washington, DC	Rite Aide Corporation			
11/20/83 1735 1741	N46411 N1436T	122.80 122.80	Bay Bridge Apt., MD Easton, MD	Rita A. Mariachei Freeway Airport Inc.			
							

This concludes the loggins from 1983 from Hank Holbrook (thanks Hank) and I apologize for taking so long to print your loggings. I just aguired a Timex-Sinclair Computer and I am in the process of learning how to use it to benifit my DX'ing. A friend of mind helped me write a program to store data from my loggings. You are invited to write or call for information. This program is written for PSB Loggings but could be easily be modified for TV. FM. AM or any Band desired.

Thanks.

Steven P. Sprachman 39-16 48 Street

Sunnyside NY 11104

IS THE HONEYMOON OVER? Radio in Spain and Portugal.

Another year has started. 1983 was a busy year for me. The year included my wedding, two trips to Europe, and my first ANARC convention. 1984 is shaping up to be as busy a year as last. Hopefully there will be plenty of time for DX.

My second trip to Europe, my honeymoon, occured in November. This time we went to the two countries of the Iberian Peninsula. Each country in Europe has a different policy on radio. Spain and Portugal are no different. In fact they are so different that it is hard to believe they share the same part of Europe.

Portugal has 4 government networks and a private network run by the Catholic Church. The 4 government networks are "Antenne 1", which played light pop music, RDP 2 which played classical music, Radio Commercial which played popular rock music, and Radio Commercial-FM which played "hard" rock music. Antenne 1 and RDP 2 were rebroadcast on FM. The network run by the Catholic Church is Radio Renascenca. R. Renascenca has seperate AM and FM services. Both played light pop music. All 4 government networks had the same news service, while R. Renascenca used its own news service. No pirate stations were heard in Portugal. Also no stations were heard above 98 mHz.

The first thing you notice about Spanish radio is the large number of stations. This is because of Spains history of legal private commercial stations. There is also several government networks. The government networks were dominated by classical music and talk. The private stations had a wide variety of service. Some were heavily formated with rock music or light pop music or Spanish music. Other stations had a very loose music format, playing everything from Flamanco music to Culture Club. The stations identified themselves by the use of names such as Radio Sevilla FM, Radio Minuto, Radio 99, and Radio España. Even AFRTS is represented on the Spanish radio scene with a station on FM in Madrid. They played American rock music with public service messages to service men.

About 50% of the music heard on the radio was American and British rock music. Culture Club. Duran Duran, and Billy Joel are very popular there now. Some Spanish and Portugese pop was heard (with a few songs we liked). And, some traditional Spanish and portugese music was heard. (A higher percentage of traditional music was heard in these countries than in other European countries I've visited).

FM in Europe is safe from jamming. This is one reason why the FM band is being used more frequently. There are parts of the Shortwave band that are almost useless due to jamming. Even AM broadcasts in Europe are now being affected. At the ANARC convention in July 83, a resolution condeming jamming was passed. At first I thought that this would have no bearing on us as TV DX'ers. Lately though, I've learned that I may be wrong. It seems that a great controversy is occuring "across the river" at the United Nations. The United States has started the process to withdraw from the UN's Educational and Scientific Organization. or UNESCO. UNESCO has started a drive to restructure the worlds communication order. The leader of UNESCO feels that the western news agencies portray the "third world" countries inaccurately. He wants the countries to have the right to control foreign jounalists in their countries, and to control the flow of information into their countries. This has been taken as an endorsement of a country's right to jam outside radio broadcasts. In the future, this may lead to the development of ways to stop the signals of satelite broadcasts. This may affect satelite television broadcasts from other parts of the world to North America. Satelite TV is the new frontier for TV DX'ers. We would not want our hobby impeded by governments that are scared of telling their people the truth. I urge all to write to the U.S. delegation to the U.N. in New York to show your support to their actions on their condemation of any hinderance of the free flow of information, whether by radio, newspaper, or satelite TV broadcast.

It's not to early to think about the upcoming ANARC convention in July 84. This year event will be held in Toronto, Ontario Canada. The sponsers of the convention, the Ontario DX Association (ODXA) is looking for ideas for programs and seminars. If you want an FM-TV seminar at the convention or you want information about the convention, then write to them at: ODXA 3 Camrose Crescent, Scarborough, Ontario MlL 2B5. CANADA.

I received a letter from Danny Buntin. He took offense to my comments in the December' 83 ANARC Update about fabricating reports. Most reports are not fabricated. But, inaccuracies do occur. Most are not intentional. My major point for writing that article was to question the whole purpose of the reports and their usefulness as presented in the VUD. I'd like to hear from members about this. What use do they have for other people's reports? Is there a better way to present reports in the VUD? Maybe I'm wrong. I'd like to know.

And finally, I've been elected to a one year term on the Executive Board of ANARC. I hope to know what my functions will be by the time you read

Spring is almost here. Me and the Misses wish everyone the best of DX.

Steven P. Sprachmon (and Joyce)



Stations on Air in \$tereo AL Thomasville WJDB-FM 95.3, now rock Boannka VA translator KS Leoti KWKR 99.9 r, on air, no nonID WA Quincy KLLH 96.7 100 h.v: 1070' I A Showenort KDAO *89.9 (may not yet be onair) LA Tallulah KBYO 104.9, k[ountry] music MI Adrian WLEN 103.9

MN Blue Earth KJLY 100.9, c. on air MS Favette WTYJ 97.7, soul MS Hattiesburg WJMG 92.1, FM-92. Justina

Sheridan network (soul music?) MS Lumberton-Wiggins (dual city ID) WLUN 95.3

has a noniD of U-95, r or rm music MS Tylertown WTYL-FM 97.7 MS All FTV-owned stations now Stereo, classical. and to be National Public Radio when flagship station WMAA-FM Jackson comes on the air in the suring. All or most of the other stations are on air: Biloxi 90.3, Booneville 89.5, Bude 88.9, Meridian 88.1, Mississippi State 88.9, Oxford 90.3. Jackson will be on *91.3. TN Livingston WXKG TN Gatlinburg WVTN 105.5 95.9, beautiful music TN Harriman WHBT 92.7, k TN Martin WCMT-FM TN La Follette WQLA 104.9 101.7

TN Milan WKBJ-FM 92.3, which now identifies with Jackson TN and uses the slogan "The New 92" (etrict) middle of the road music

TN Savannah WORM-FM 101.7 AT Calgary CKRY 105.1 AT "I think it could be safely assumed that all

CKUA-FM repeaters are \$tereo." [I don't assume anything about Canada \$. Look at all the CFFM [Kamloops BC] relayers; they're monophonic.]

Slogans/True NonIDs IA Dubuque KFMD 92.9 no nonID IN Earl Park WIBN 98.3 FM-98, \$tereo, k, adds Fowler and Kentland to its multi-city ID. IA Dubuque KY Bowling Green WLBJ-FM 95. / 500 n,v; 530 KLYV 105.3 LA Port Sulphur KHAA 106.7 25000 h,v; 115' MD Raltimore WRYD *96 7 YO-97 MI Grand Rapids WZZR 95.7 W-Lite, still rock ME Gorham WMPG *90.9 (from 91.7) 180 w

MN Glenwood KZZA 107.1 FM-107 (replacing ZZA) MN Worthington KWOA-FM 95.1 KO-95 (not strict); no 92 kHz SCA carrier heard

OK Lawton KRLG 98.1 98-FM TN Hendersonville WMAK 92.1 The Music City's Mix and other slogans; calls given only at legal ID time on or near the top of the hour TX Merkel KMIO 102.3 K-102 (strict)

VA Arlington-Washington DC WAVA 105.1 Hitradia/ WI Baraboo-Madison WLVE 94.9 Alive-95
MN (Newstrans & RPC +90.1 /fem_90.6) Off The Air

IA Waterloo KFMW 107.9-tower fell because of ice sterm: on with weak signal: full nower in 7-8 months TN Knoxville WKCS *91.1-equipment said to be over 30 years old and needing replacing; not deleted.

New FM Stations Authorized

AL Montgomery *89.1 15000 h,v; 210*, M. Ed. Rad. NY Kingston WFGB *89.7 3100 h,v, directional AR Yellville 97.7 2450 h,v; 330'

CO Eagle 101.5 36000 h.v; 2210' IL Gibson City WGCY 106.3 3000 h.v; 300'; \$tereo. middle of the road music-ON THE AIR!

KY Keavy (36-58-21; 84-07-28) WVCT *91.5 115 h.v: 90'-Vocational Training School MN Chishalm-Hibbing W205AA *88.9 \$. a (KDNW *90.5 Duluth MN translator): on the air

MN Osakis 103.9 2400 h,v; 340'; gospel music MN Virginia-Hibbing *90.9 \$, classical, 9700 h,v; 650'; P; MN Public Radio; transmitter about 8 km north of Buhl MN. Target: Aug., Sept. '84.

MT Helena 105.3 68000 h,v; 2250'

OR Bend 105.7 100000 h,v; 1065' TX Granbury 106.7 100000 h,v; 570'

TX Laredo KBNL *89.9 100000 h,v; 200', g, Educom VA Pound WWLH 102.3 280 h,v; 990' TX Seabrook 92.1 1150 h,v; 485', Spanish/Latin

TX Uvalde 102.3 3000 h,v; 210'

UT Midvale 102.7 100000 h,v; 665-initial decision-subject to reverse

OK Ponce City K272BE 1023 (KCFO 98.5Tulse) FMistakes (FM Atlas errors) VA Lynchburg W224AG 92.7 \$, r, WXLK 92.3 AK Fairbanks, should be in bold type, p. 65

MA Raymond 97.7 230 h, v; 920' WV Sutton WCKA 97.1 23000 h.v; 690'

Facilities' Changes Granted AZ Marana KOPO 98.3 300' (3000 h.v) AZ Tucson KNDE 99.5 75000 h.v: 170' AR Mena KUOL 101.7 3000 u.v. 300' AR Jacksonville KEZQ 100.3 505' (100000 h.v) AR Pine Bluff KFXE 92.3 100000 h.v: 400' AR Texarkana KADO-FM 107.1 980 h.v; 485' CA Escondido KOWN-Fili 92.1 1025' (170h,v) CA Le Grande KEFR *89.9 (from 90.1) 2100 h.v: 1975' CA Los Angeles KLOS 95.5 61000 h.v: 3130'

CA Modesto KBEE 103.3 50000 h.v: 500' CO Brush KBUL 107 1 110' (3000 h.v) CO Denver KCFR *90.1 50000 h.v (910') KOSI 101.1 1010' (100000 horizontal; 80000 watts vertical effective radiated powers; directional antenna continued,

CT Middlefield WPRH *90.5 15000 h.v: 725' FL New Part Richev WLPJ *91.5 (from 91.7) 195' (3000 horizontal and vertical) Ft. Tailahassee WAMF *90.3 (from 90.5) 160

watts horizontal only; 140 feet GA Athens WNGC 95.5 1270' (100000 h.v) IL Salem WJBD-FM 100.1 1150 h,v; 450' IN Fort Wayne WBNI *89.1 31000 h,v; 450' IN Kokomo WUSK *98.9 (from 89.1) 10 watts

horizontal and vertical; 96 feet IA Grinnell KDIC *88.5 420 h.v; 125' KY Rowling Green WLBJ-FM 96.7 500 h.v: 630'

horizontal only; 225 feet MA Boston WRBB *104.9 18 h,v; 87' MA Worcester WICN *90.5 8100 h, 7200v; 365' WAYW *91.9 500 h.v; 475' MI Guylord WEGS 95.3 2650 h,v; 325'

MI Holland WJBL 94.5 50000 h,v (500') off air MN Austin KAVT-FM *\$1.3 135 h,v; 210' MN Fairmont KFMC 106.5 100000 h,v; 370'

MN Wadena KKWS 105.9 100000 h,v; 565' MN Winona KSMR *92.5 (from 90.9) 9 watts h & v:-205'

MO Kansas City KBEQ 104.3 100000 h,v (950') MT Helena KBLL-FM 99.5 790' (30000 h,v) NM Rio Rancho (KZIA-FM 101.7) is said to be about 16 km north of Albuquerque NM.

and 1510 feet above average terrain NY New York WNEW-FM 102.7 7800 h.v. 1220'. apparently to be on the Empire State Bidg. OH Eaton WJAI 92.9 410' (20000 h,v) PA Hazleton WVCD 97.9 19500 h.v. 730'

PA Waynesboro WAYZ-FM 101.5 50000 h,v directional antenna (21') SC Bamberg WWBD-FM 92.1 (from 92.7)

SC Batesburg WKWQ 95.3 (from 92.1)-both of above to permit WTWE Manning to go to 92.5 TN Bolivar 96.7 WOKZ (WVST), "KZ-97." Stereo. SD Sisseton 102.9 465' (100000 h,v) TX Fairfield KNES 92.1 940 h.v; 500'

TX Memphis KLSR-FM 105.3 61000 h.v (77') M1 Helena 105,3 68000 n,v; 2250 TX Pearsall KVWG-FM 92.9 back to 29500 n,v; 710' E. NM Universty. UT Logan KBLQ-FM 92.9 back to 29500 n,v; 720' SCA (67 kHz) †Subcarrier News VA Colonial Heights WPVA-FM 95.3 -changes

city of license from Petersburg VA WV Charles Town WXVA-FM 98.3 1200 h,v; 300'

Bruce F. Elving, Ph.D., Editor 4515 Avenue "E" Kearney NE 68847

Contributions invited!

GA Dublin 92 7 WKKZ (not WXCI), p. 28 TX San Marcos KEY! remove "from 103.7" p. 51 TX Sinton KOUL remove "from 103.3," p. 51 NB Fredericton should be in bold type, p. 67 NB Moncton " " " " p. 67 NB Saint John " " " p. 67 ON Sault Ste. Marie "" " " PQ Chapeau should be in larger type, p. 66 PO les de la Madeleine misspelled p. 67

PQ Jonquiere should be in larger type, p. 67 PQ New Carlisle, New Richmond, Perce-should all be in larger type, p. 67

MEXICO Irapuato should be in bold type, p. 68 Reynosa For Canada, Puerto Rico, Virgin Islands, Mexico, Alaska, Hawaii, St. Pierre & Miguelon and Kalatdlit-Nunat: Some other towns were mentioned by a reporter for having larger type or boldface, but they fail to most the test, which I will list here (and valid when the FM ATLAS was printed): To qualify for boldface a town must have three or more stations with 500 watts or more power each. To qualify for the largest type size (but not boldface) at least one station must have 500 or more watts. To qualify for the medium type size; at least one station must have between 50 and 499 watts. Towns having

only stations with 49 watts or less get the smallest Multi-City Identifications in Use

CA Mariposa KUBB 96.3 adds Merced CA Paradise KRIJ 92.7 adds Chico CO Greeley KGBS 96.1 adds Fort Collins IL East Moline WLLR 101.3 adds Davenport IA IL Pekin WGLO 95.3 adds Peoria IL MT Chinook KRYK 101.3 adds Havre MT NE Grand Island KSYZ 107.7 adds Hastings-Kearney NY Buffalo WPHD 103.3 103-PHD (nonID) PA Wilkes-Barre WYZZ 92.9 adds Scranton-Hazleton TN Jackson WKIR 104,1 adds Humboldt-Henderson

type size.

Call Letters Granted AK Clover Pass 107.1 K296AW assumed: not K296BA (FCC microfiche alleges it's K2960A, but too high a letter combination to be possible) AR Sheridan 102.3 KKBE (KKDI-FM) CA Fremont 104.9 KBRG (KDOS) CA Mariposa 105.5 K288CD (not K288BU) CO Fruita 99.9 KEKB GA St. Mary's 93.5 WLKC, CO Pueblo 99.9 KVUU (KYNR) FL West Palm Beach 107.9 WIRK"-FM" (WIRK-FM) IN Covington *90.3 WEDE KS Derby 95.9 KAKZ-FM (KYMG) MD Annapolis 99.1 WHFS (WLOM); still "Progressive/ MN Alexandria 99.3 KSTQ MN Anoka 107.9 KGBB (KTleit), E-108 (strict) MN Minnespolis 102.9 WLTE (WCCO-FM), W-Lite MT Browning *88.7 KBFT NC Shallotte 106.3 WPGO [March, '84 NC Wilmington *91.3 WHQR, cj. expected on air / [Calls stand for "High Quality Radio."] OK Woodward 101.1 KWOX, 1205' (100000 h,v) OR Bend 97.5 KNLR

WI Three Lakes 107.1 W296AD (not W296AB)

TX Mercedes 106.3 KGAR (KTXI)

UT Orem 107.5 KUUT (KARE)

FL Tallahassee WOWD 103.1 no SCA, rock on main channel, WGLF 104.1 no SCA IL Chicago WMBI-FM *90.1 no SCA NJ South Orange WSOU *89.5 talking book for blind

still country music and 24 hours per day on air

FCC—FM NY Wethersfield WUWU 107.7 may be sold, is soften ing its rock, may add more jazz.

VT Montpelier WNCS 96.7 +X (data on ski conditions, ads, travel information, maps and entertainment listings through decoders to be connected to TV sets in resort area condos. etc.)

Formats/Networks

CO Derwer KPKE 95.7 K (ABC Rock network) GA Tifton WCUP 100.3 rock, C-100 ID Twin Falls KEZJ 95.7 k, now FN-95, CBS IL Champaign WPCD *88.7 rock (not progressive. "almost no heavy stuff") IL Elmwood Park WXFM 105.9 rock, station sold IL Kewanee WJRE 92.1 rock (was country) LA Lafayette KRVS *88.7 mostly i, no rock-still some French language programming? LA New Roads KOXI 106.3 soul 24 hours MA Worcester WCUW *91.3 jr, still believed to have

some Spanish language programming MI Caro WKYO-FM 104.9 adds some k with r and nighttime progressive music programming MI Detroit WLLZ 98.7 ABC-FM network MI Port Huron WORW *91.9 jazz and rock MI West Branch WBMI 105.5 no network, back on air with new owners (in receivership from previous

ownership): still mk MN Dubuth KIIMD *103.3 II in addition to NPR MN Richfield KDWB-FM 101.3 ABC-Contemporary NM Clovis KCPK 107 5 rock OH Lorain WZLE 104.9 all g; "Victory-105"

OR Portland KKRZ 100.3 rp (aibum rock) PA Johnstown WKYE 95.5 RKO network PA Williamsport WKSB 102.7 The Source (not NBC) TN Germantown WLVS 94.3 beautiful (from k) TN Greeneville WIKQ 94.3 mr (from k[ountry]) TN Jefferson City WKJQ 99.3 rack (from a) TN Red Bank WJTT 94.3 soul (from r and k) TN Trenton WLOT 97.7 km, \$tereo TX Brownsville KBNR *88.3, Spanish, gospel

TX Fredericksburg KFAN 101.1 rock, "K-Fan" TX Galveston KXKX 106.5 Spanish/Latin, back on the air MI Detroit WABX 99.5 mr. seeks new calls TX Longview KYKX 105.7 country music TX Snyder KSNY-FM 101.7 rock, K-102 (strict) FM" VA Arlington WAVA 105.1 K (ARC Rock) not U. WA Seattle KEZX 98.9 rock (from beautiful) ON Guelph CKLA 106.1 beautiful and classical

must have very old and/or out of adjustment equipment. The only set I could not eliminate "birdies" from was an early stereo (1962 or '63 vintage) Heath-

kit receiver. That unit was a poor design! . . . Both WIZM 93.3 La Crosse WI and WTEX 93.9 Hibbing MM carry the same satellite SCA music.

STV (subscription TV audio) SCAs are transmitted on three distinct types of sidebands. Type 1 is at 15,734 Hz, and is on stations like Milwaukee 25, San Francisco 26, Atlanta 26, New York 57, 67 (and impossible to tune in on UHF-TV audio radios to date), while Type II is the easiest to tune in, being at 63,000 Hz, and available on stations like Chicago 44 and San Diego 57, while Chicago 60 has quit STV. Type III is at 39,335 Hz and is easily tunable on FM-SCA radios having variable SCA tuning, and found on Clicago 66, Washington DC 50, New York 47 and Minneapolis 23. And John is getting a fine test signal out of KFAI *90.3 with 125 w atop the Foshay Tower, downtown Minneapolis (see previous page), at his home in suburban Bloomington, using a Superadio with no outside ant. John Robertson: Concerning V/LBS 102.7 Mount Clemens MI, the person who said it plays rock may be right but it depends on the time of day. Sometimes they play quite a few rock songs in a row but sooner or later they throw in a soul song or sometimes even a discosounding song. Sometimes they play one soul song after another, throwing in a rock song once in a while; must depend on who the DJ is. CONTRIBUTORS THIS ISSUE: Jose Bahr, Rio Piedras PR.P. L. Boersma, Spring Lake MI; John Clemmer, East Moline IL; T. V. Cornell, Greentown IN; Mike Domer, Metarice LA, John Ebeling Bloomington MN; Wendell Ford, Westville IN; Charles George, Dalls TX (who sent an article saying how RCA voted not to buy KIXK 106.1 Denton-Dallas and is looking for another buyer); Mike Lockart, Perry FL; Nick Lombardi, Atlanta GA; T. K. McVey, Bolivar TN (who has heard a mysterious "WIBS" 93.1 while in Knoxville—a pirate, Oct 11-12, '63; Oave Nieman, Akron NY (who is not giving up FM DXing, and

reports that WZIR 98.5 Niagara Falls NY may get new call letters, WRXT, and have "adult rock"); Jim Pizzi, Lovington NM(who needs specific information on Radio Belize 88.9); Richard Porter, Wood Dale IL; Richard Reese, Jersey Shore PA; John Robertson, Croswell MI; Leslie Price, Wilmington NC; B. P. Tiernan, Scotia NY. GET YOUR COMPUTER UPDATINGS NOW! I am no longer associated with Kearney State College, but have use of their computer facilities for now. But they are going off the keypunch system, probably in March, and I will be without a computer capability for a while after that. Computer printouts, thorugh February are: \$10 entire U. S., specify if by geography or frequency; \$5 Canada; \$2 Mexico, or \$2 individual states. Minimum computer order \$4. Fill applications, new stations and translators, U. S. \$6. Here's your chance to get program data, etc. by frequency and more updated than the "FM Atlas." Order from me, B. E., at the address found at the top of this column. Good DXing!

Readers' Reports February, 1984

XHGU 105.9 Ciudad Juarez is on the air in stereo, while there is no sign of 107.5 there. ID Weiser KV/EI-FM will come on the air on 99.3, not 100.9, while KDAK-FM Carrington ND moves from 97.7 to 98.3, to allow KFNW-FM *97.9 Fargo to move its transmitter.

Mike Dorner notes no indication of KHAA 106.7 Port Sulphur LA coming on the air. "The oil depression has hit oil-rich Plaquenimes Parish very hard; the recent very cold weather has destroyed its second major industry, citrus fruits." Hip pack one page and you'll see KHAA is reducing power.

Mike's comments last month about poor FM car reception in St. Louis and Atlanta prompted three responses so far. Tom Cornell, himself a car radio design engineer, says: My vote for best FM overload performance goes to Delco, Chrysler and F ord car receivers. Not Motorola, I'm not sure Motorola is even making car sets any longer. That name was sold to ARA of Japan, and I think they are even phasing it out; perhaps it is still used for American Motors original equipment. In any case, Motorola receivers (ARA-included) never were very hot for FM overload. Most Japanese sets, as a class, are poor in overload compared to American sets. If the set has a local/DX button, you can just about guess that it is not too hot! Those buttons do work, but the engineer is asking you to fix a problem: a) he doesn't know how to fix, b) he is too cheap to fix, or c) he thinks you want a button to fiddle with while you are driving. Lest we American designers become complacent on the basis of the above, I've recently seen one (only one!) Japanese original equipment set that about equals ours for overload. Delco sets are still the most sensitive, however! Our ETR's are hard to beat. Tom then points out that WHSK Kokomo's just-approved frequency change (see previous page) resulted from his technical aid, and they were to have had their new circularly-polarized antenna in use by the time you read this, making that station more DX-ready, "ARI is a distinctive [SCA] signal. It uses an AMmodulated 57 kHz carrier and could be useful for identifying those few stations involved. SCA's are much more interesting, however, and I'd recommend DXers choose that first." [Tom probably means DXers should pay primary attention to the normal 67 kHz SCA frequency rather than to ARI.] Also contributing: Peter Fah, Jr., Dubuque |A; Paul Gaines, Detroit

Nick Lombardi writes: Regarding FM reception in downtown Atlanta, my car does not have FM, but I have driven a number of FM-equipped GM rental cars through the downtown area and encountered no problems at all except for occasional mourate amounts of multipath. And in the office building where I work (which is a 26-story steel and granite structure near downtown) people throughout the building use FM radics with no apparent problems. Interestingly, AM reception in that same building is terrible, with weak signals and hargendous electrical interference the rule. (Outside the building. however, AM reception is fine.) WMCG 104.9 Milan GA was too weak to tell if Stereo or not. I am aware of your hyper-interest in the stereo status of all stations, but you nee need to remember that most tuners require at least a moderate amount of signal before they will switch to stereo, and this point actually tends to be somewhat higher in recent equipment than in tuners of older vintage. [Yet, you can listen to see if "stereo" is mentioned as a feature of a station's broadcasting even if the station is too weak to get in \$.]

An article he sent indicates that WABE *90.1 Atlanta is still having problems with poor TX Wichita Falls KNIN-FM 92.9 rock, "The New 92/ reception in northeast Atlanta, with the station even flying helicopters around trying to pinpoint the problem. I wonder if they've considered installing an FM translator? WA Bremerton KWWA 106.9 rock AP network (x-U) WNGC 95.5 Athens GA (see previous page) will have its new tower at Neese GA, 9 miles NNE of Athens, giving secondary coverage to Atlanta, and a country music alternative to some Atlanta people. John Ebeling also comments on mobile FN and other

ON St. Catharines CHRE 105.7, apparently dropping stuff: You failed to mention OEM Chrysler radios such as Weldon's [Patterson—Carol Elving's ON Windsor CJAM 91.5 rock, French [rock, now b. father] and mine. My Reliant has an EXCELLENT car radio on both bands. It performs extremely well in high signal strength areas such as Duluth. Last month I sat in the Greyhound bus parking lot in downtown Hinneapolis in the shadow of the IDS Tower and had only one cross-modulation spot on the dial. I spent an hour waiting and was able to really tune around the dial in a high, trouble-some signal area. I could tune in St. Cloud, Eau Claire, etc. The unit far outperforms the Japanese units (with DX switches) I have worked on or owned. Your long Jan. VUD column made for interesting reading. At some future time, I will try to provide a better quality tape of the ON/MB English and French signoffs. I, too, have written CBQ in Thunder Bay asking for a station listing. No response in about three weeks. I may have Ira [my write] call CBQ when she is in Thunder Bay and see if they can be prodded . . I believe whoever says there is no worse adjacent channel interference using a 92 KHz SCA is a little crazy for us D.Xers the new SCA frequency can do nothing to help, but only hinder us in our quest for D.X. [I said the 92 kHz would not hurt SCA and mainchannel DX, based on experience with 92 KHz in NE, so does that make me crazy? -B. E.] Someone mentioned "birdies" on stations with SCA. They



			221 Pinewood Road
FM	QSL		Baltimore, MD 21222
ON	CFNY	102.1	, ,, , , ,
			Haydu, CE in 1½ month. Holbrook
FL	WQCS	88.3	Fort Pierce, 3209 Virginia Ave., 33450. Received a card from
			Brian Scheider in 5 days, after 1 follow-up report. Holbrook
	WHRS	90.7	Boyton Beach, 505 S. Congress Ave., 33435. Received card after
			1 follow-up from Gordon Shockney, CE in 2½ months. Holbrook
LA	WWOZ	90.7	New Orleans, P. O. Box 51840, 70151. Received card after 1 follow-
			up report from Eric Glaser in 2 months. Holbrook
ΜI	WNWN	98.5	Kalamazoo, 6123 S. Westmore Ave., 49002. Received letter from
S.D.T	wwow	05.7	Gary Mallerivee (?) Pres. in 2 weeks. Ross
MN	KKOK	95.7	Morris, Box 231, 56267. Letter from Bill Eckersen, Program Dir.
			who mentions their being heard on skip in Vancouver, BC & also in
	ICDAILI	00 5	GA, AR, VA & says their SCA is for Market Quoters. Elving
	KDNW	90.5	Duluth (no address reported) Letter from Paul Harkins says how
			helpfull my FM Atlas is in understanding the locations of inter-
			fering stations on adjacent freq's & noting interfernce to listeners
			to the north coming in on occasional basis from CBQT 90.5 in Fort Frances, ON. Elving
	KVSC	88.1	St. Cloud, St. Cloud State Univ. 56301. Letter from Daniel P.
	KVDO	00.1	Zimmerman, CE in 3 weeks. Holbrook
MD	WWIN	95.9	Baltimore, 2800 Mathews St., 21218. Letter from Thomas Bless (maybe-
			hard to read!) in 4 days. Holbrook (exWBKZ-FM)
PA	WWSW	94.5	Pittburgh, 1 Allegheny Square Center, 15212. QSL card in 16 days
			from Linda McPoland. Send bumber-sticker, baseball cap & a t-shirt!
			This gave me a new state qsl'ed on FM! George
	WOWQ	102.1	DeBois, 80N Park Place, 15801. Send old WCED card with WOWQ inked
			in, and was almost destroyed up in mail (chewed up!!!) & was
			signed by Larry Fisher, CE, and received in 3½ weeks. Holbrook
	WEAZ	101.1	Bala Cynwyd, 10 President Blvd.,19004. Letter from Lee Martin,
			Operations Manager in 3 days. Holbrook
ΤX	KIXV	95.3	Brady, 117 S. Blackburn, 76825. Memo in 4 days from Ed Keeler. George
	KSBJ	88.1	Humble, P. O. Box 187, 77338. Form letter from Buddy Holiday, Stn.
		400 5	Mgr. in 2 weeks. Holbrook
VA	WUSQ	102.5	Winchester, Box 828, 22601. Letter from Gary Kirtley, General
		00.0	Manager in 4 days. Holbrook
	WXLK	92.3	Roanoke, Box 92, 24022. Letter from Eugene R. Gabriel, CE in
	WEMC	91.7	10 days. Holbrook
	WEITE	/1./	Harrisonburg, Eastern Mennonlite College & Seminary, 22801. Letter from John Davidhizar, Gen. Mgr. & Dir. 100 watts on from 6am to
			midnight. Send very nice letter. Holbrook
	WMVA	96.3	Martinsville, P. O. Box 3831, 24112. Letter from Lynwood J. Judkins,
	******	,,,,	Pres. send in 9 days. Holbrook
	WINC	92.5	Winchester, Drawer 3300, 22601. Letter in a fast 3 days!!! from Davi
	-		P. Lewis, General Mgr. Holbrook
	WQKS	96.5	Williamsburg, P. O. Box 180, 23187. Letter & bumber-stickers were
	•		send from George Ramsey, CE in 8 days. Holbrook
	WJYJ	90.5	Fredericksburg % 830 Gunnery Hill Rd. Spotsylvania, VA 22553. Send
			a poor verie on a business card! with note "Report acknowledged
			5/10/83 Pete Stover, Stn Mgr." Holbrook
WI	WXPR	91.7	Box 254, 54501. Letter from Peter D. Nordgren, Pres., whom I know
			personally says "Your description is accurate, and you are the most
			distant report to date." Elving

This months' reporters are: Hank Holbrook of Chevy Chase, MD; Robert S. Ross of London, Ont. Canada; Charles George of Dallas, TX; Bruce F. Elving of Kearney, NE who says he only writes for QSL's from Duluth-Adolph, MN. So his items are not qsl'ed from Kearney. This months' column was typed on an on-loan from my typewriter repair shop as the machine is still messing up! I got myself a Timex-Sinclair-2068 computer for Christmas. So up coming months I hope to type up a special list of names of all members that ever reported to this column since I began doing it. With this list I will point out my thanks alot for your support over the years, & hopes that more new reporters will join the list in 1984. 73's for now & good dx'ing & qsl'ing... Ralph Strobel, editor 2300 E. McGalliard Rd. Muncie, Indiana 47303 Deadline: the 7th

February 1984

Report to Central FM if you live in the central states of MN IA MO WI IL IN MI & OH

Jeff Kadet - Box 20 - Macomb, IL 61455 Equipment: McIntosh MR-78; \$tereo Probe 9 up 28 feet. (CST)

10 h		to t
10/1 tr 0500 WGTE 91.3 OH Toledo	775	11/23 tr 0415 WKOA 100.3 KY Hopkinsville, SID 305
10/9 tr		
0400 KFMZ 98.3 MO Columbia, album r	145	11/23 ms 0515 WDDQ 92.1 GA Adel, State #33, 760
0535 KLWT 92.1 MO Lebanon, s/on	220	"South Georgia offers more services
0600 KNJY 97.7 IA Clinton, s/on	95	than any Adel banking company"
10/10 tr		11/26 tr
0230 KKIX 103.9 AR Fayetteville,	360	0546 WEFM 95.9 IN Michigan City 210
"Kix-104 24 hour \$tereo Country"		0600 WKOC 88.3 IL Kankakee, s/on, 145
0315 KAMO 94.3 AR Rogers-Bentonville,	350	"Radio Voice of Olivet Nazarene"
k, r O400 KJBR 101.9 AR Jonesboro, r,	325	0107 WYBR 104.9 IL Belvidere
Bob Leonard DJ	222	11/29 tr
10/28 tr		0500 WOTY 93.5 IN Linton, s/on 205
2328 KLSI 93.3 MO Kansas City	235	0500 WOTY 93.5 IN Linton, s/on 205 0503 WHIC 94.3 KY Hardinsburg, 285
10/29 tr		My first KY Class A
0020 WYNG 105.3 IN Evansville,	240	12/2 ms
"WYNG 105," (pronounced "wing"),		0355 <u>WDYL</u> 92.1 VA Chester, 760
Mx Country Radio Network		"on WDYL" Then mention of local
10/30 tr		high school play; 25 second burst
0500 WVUB 91.1 IN Vincennes, s/on		0433 WCTX 92.1 PA Palmyra, 725
0518 WBDJ 97.7 IN Brazil, soft r,	195	"l miles NNW of downtown Palmyra"
oldies, "All new 97-DJ"		same annor. heard later with mention
11/4 tr	270	of Greencastle
2358 KSCM 99.3 MO Houston, s/off 11/5 tr	250	12/13 ms 0130 KTBC 92.1 TX Nacogdoches, 655
0500 WCEK 102.3 IN Martinsville, s/on,	225	"KTBC"
then Dave Young w/nx, "FM-102		12/14 ms
0500 WSAL 102.3 IN Logansport		0510 WMMK 92.1 FL Destin, "K-92" ID 755
11/22 tr		followed by NBC news. Ad also for
1940 WKTG 93.9 KY Madisonville, 94-KTG	275	
2107 WCIC 91.5 IL Pekin, new station		(Locally, WJEQ 103.1, which is NSP and
on the air, religion programing, at leas	st	makes that my worst frequency with 1
they are not all night.		station, changed for. from k to k and pop)
Thus far only 3 members have contributed	i to	the list of all night stations of the
educational band and Class A frequencies		
		gives me a lump in my throat. Seriously,
as an added inducement all contributors		
"I TROPS & E-SKIP" bumper sticker I window or in your shack. SASE appreciate	resi;	gned. It can be used inside a car back
		Fair enuff?) Station total now at 635. 73.
and one man band on	-7.	rail enail., station total now at 05% 7%
+ + +	+ +	+ + + + +

John Ebeling - 9209 Vincent Ave. So. - Bloomington, MN 55431

I do have a little (and it is little) DX to report since last time. The evening of Oct. 23 turned out to be a real good trops opening. I failed to enjoy most of it, but what I did catch was enjoyable from the DX angle. The measly DX is as follows:

From the Bloomington, MN location: 10/23 tr 2030 KCGN 101.5 MN Ortonville	11/30 tr 2200 KQAD 101.1 MN Luverne, ex-100.9
2330 KKWB 105.1 MN Breckenridge	
"Double KFM'	***************************************
2344 KNEN 94.7 NE Norfolk,	2300 KZZA 107.1 MN Glenwood
+ SCA chirp	From the Prosit, MN location:
11/18 tr 1800 KRPC 90.1 MN Owatonna,	11/6 tr 1330 KGCN 101.5 MN Ortonville
ex-90.5	1400 W280AD 103.9 MN Hibbing
11/21 ms 0300 KGOR 99.9 NE Omaha	11/26 tr 1700 W269AG 101.7 MN Virginia

CENTRAL FM DX

John Ebeling cont'd:

FEBRUARY 1984

That's about it. You will notice that several stations have changed their frequency of operation and are counted as new. Each frequency has its own set of problems (ie locals, overload freaks, etc.) as far as reception is concerned along with a DXers location. I, therefore, count each frequency change as a new station. I know other members may and will dispute that fact, but I have made that decision over 30 years ago and will continue to abide by it. (I agree with you-RS) Regards until next time.

Bob Zent - 1835 Fruit St. - Huntington, IN 46750

	75
	05
12/11 ms 0419 WCKWt 92.3 LA Laplace, "It's now exactly 19 minutes after 79	90
3 o'clock at River Parish Radio" (t = tentative)	
	60
0600 KOSI 101.1 CO Denver, call letters heard, (prev. heard via ES) 100	
tr 2357 KZZC 98.9 KS Leavenworth, "ZZ-99," local promo mentioning KS City 49	
	60
(previously via tr) WHBF"	
0454 KZZC 98.9 KS Leavenworth, "all request hour and Jethro Tull 49	90
(previously via tr) after this. ZZ-99"	,,,
	20
0613 KTEZ 101.1 TX Lubbock, "easy-KTEZ" (previously via ES) 102	
12/24 tr 1200 WVWV 103.1 IN Covington, ID, (WHUZ off)	10
12/25 tr 0105 CBEE 95.1 ON Chatham, station locations given at s/off (CBC radio) 1	70
(WFWQ 95.1 IN Fort Wayne, off air)	
ms 1253 WWWL 93.9 FL Miami Beach, "around South Florida's most 107	75
exciting formula racetrack"	1)
	20
s/off. (CBC radio) (over WLLZ Detroit)	
I was more than a little disappointed by the Geminids this year, after losing a lot	t
of sleep. The peak was unquestionably on the 14th, but the bursts were too short t	to
be of much use for identifying anything. Hope everyone had a nice holiday season.	•
more and a fitte notitual season.	

+ + + + + + Ralph Strobel - 2300 E. McGalliard Rd. - Muncie, IN 47303

11/13 Es 112/14 ms	
2000 WWWL 93.9 FL Miami Beach, rm\$ 1025 0130 WSPA	98.9 SC Spartanburg, 450
2009 WINZ 94.9 FL Miami Beach, r\$ 1025 ".	WSPA-FM Spartanburg"
2014 WAIA 97.3 FL Miami, "A-1-A," 1025 12/24 ms	
o/WMEE, r\$, ment. Miami blacks 0418 KZZC	98.9 KS Leavenworth-KC 520
2030 WMCU 89.7 FL Miami, g\$ 1025	"ZZ-99"
12/3 Es 1455 KRDO	95.1 CO CO Springs-Pueblo1045
) "A Merry Christmas and a
	Year to all of you - KRDO-FM
1820 KFLQ 91.5 NM Albuquerque, 1260 Colorado	Springs-Pueblo. Deck the Halls
g\$, "FLR" with"	•
12/5 tr 12/29 tr	
0025 WCIC 91.5 IL Pekin, g\$, WBEZ off 230 2300 WYHY	
	-107.3 "Y-107," r\$, wx
0908 CJRT 91.1 ON Toronto, (prev. tr) 375 1/7 Es	
"CJRT-FM 91 point 1" 1515 unII	96.9 ?? Opera in mono to NE
	yee, a special in money to Mi
If you noticed an absence of CFM last month, it was t The E-skip I have heard this winter has been much too	ecause there were no renorts

hope the unusually cold winter won't destroy the FM DX totally.

WENS fm97





Doug Dornbos P.O. Box 1288 Traverse City, MI 49685-1288

February 1984

Dear Fellow DX'ers,

Last months VUD carried an excellent segment of Bill Thompson's continuing experiments with a homebrew FM yagi. What makes the experiment so worthwhile is not so much the results but the learning and enjoyment that is gained by doing it. I remember the first antenna that I ever modified, it was a stacked conical that I got from an antenna dealers junkpile of old antennas that he had taken down. I cut the elements shorter to increase performance on the FM band, cut out the high band elements (it was a deluxe model) and hooked it up indoors. A freak thing happened: I picked up WDIZ from Orlando, FL, still the furthest station I've ever received. It was also this stroke of luck that got me interested in DXing as I had never thought of it before. (Note that it still was a junk antenna, just that it was better than the slot-loaded quarterwave I was using at the time). Experimenting with antennas is fun, I hope you try some of your own. I know you'll enjoy it.

MACAZINE ARTICLES * THE FIRST HALF OF TRICKY DICKY (and some from before)

Aesthetic Eyesore Log Periodic Antenna Rothing With Homemade Baluns Square Rigger Mast 40ft Self-Supporting Tilt-over Mast for \$50 Is a Balun Required? Antenna Amplifiers Antenna Amplifiers Antenna Amplifiers Antenna Amplifiers Consumer Reports Helical Aerial For Bands 4 & 5 Wireless World FM Fringe Antennas Consumer Reports How To Improve Your FM & TV Reception House & Garden TV-FM Signal Splitters Consumer Reports How To Improve Your FM & TV Reception TV-FM Signal Splitters Electronics World Stripes In Auto Glass Tune Radio & Melt Snow Product EngineeringApr 21, Installing A Home MATV System Electronics World Stripes In Auto Glass Tune Radio & Melt Snow Product EngineeringApr 21, Installing A Home MATV System Electronics World Stripes In Auto Glass Tone Radio & Melt Snow Product EngineeringApr 21, Installing A Home MATV System Electronics World Stripes In Auto Glass Tone Radio & Melt Snow Product EngineeringApr 21, Installing A Home MATV System Electronics World Apr Build The Pyramidal TV/FM Antenna Popular Electronics Jun Wireless World Apr Belectronics World Belectronics Sep Transistorized Car Antenna Fitted Into Supporting Stem of Fender Mounted Rearview Mirror Augun Corona & Precipitation Interference In VHF TV Reception Proceedings Oct Empirical Study of FM Antennas Audio/ of the Inst. Elect. Engineers Poor Mans TV Rotor New Solid-State TV Rotors Radio Electronics Bec Torona & Precipitation Interference In VHF TV Reception Proceedings Corona Study of FM Antennas Audio/ of the Inst. Elect. Engineers Torona & Precipitation Interference In VHF TV Reception Proceedings Corona & Precipitation Interference In VHF TV Reception Proceedings Torona & Precipitation Interference In VHF TV Re				
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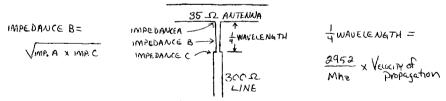
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TRANSMISSION LINE TRICKS

There are a few things you can do with transmission line itself that may prove useful and fun to you. They are basically making balun transformers and interference traps. The baluns shown are shown with coax because that's the only way to make them. The impedance transformer can be made with either coax or twin lead but is shown using twin lead because it's easier to make your own if a wierd impedance is needed. The traps are shown using coax because of the difficulty in splicing two pieces of coax together. It must be mentioned that all the transformers and baluns will work over only a small frequency range and are not useful on an all band antenna. They will work well on say, a FM yagi or a weather frequency yagi, but not on a channel 2 thru 13 Vhf model. If you are interested in the theory behind these projects I refer you to The Radio Handbook by Orr, and Basic Television Principles and Servicing by Grob.

THE IMPEDANCE TRANSFORMER

Let's say that you have made an antenna for 162.4 Mhz (weather) and some how figure out that its' impedance is only 35 ohms. If you want to use a 300 ohm transmission line you can see that you have quite a mismatch. The solution is to use a $\frac{1}{4}$ wavelength section of twinlead which has as its' impedance, the geometric mean of the two impedances it's hooked up to. For our example this would be $\sqrt{35}$ $\frac{1}{2}$ 300 or approximately 100 ohms. The length of the quarterwave section is found by dividing 2952 by the frequency in Mhz and then multiplying by the velocity of propagation for the line were using to make the $\frac{1}{4}$ wave section from. In our example if we were using air insulated twin lead, it would have to be 18 and 3/16 inches long.



THE QUARTERWAVE BALUN

A balum you will remember changes a balanced line to an unbalanced line or vice-versa. It does not in this case refer to a change in impedance. Let's say you have made a simple straight dipole for the FM band. Its' impedance is 75 chms and it is a balanced antenna. The solution is to go to the point $\frac{1}{4}$ wavelength back from the antenna on your coax and cut a band out of the jacket of the coax so that the shield shows around the cables entire circumference. Now attach a $\frac{1}{4}$ wavelength piece of conductor to that point. You now have a balanced line on that $\frac{1}{4}$ wavelength cable and an unbalanced line on the rest of the cable. A pair of crimpers would be most handy for

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The t-wave balun (cont.)

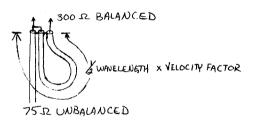
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attaching whatever you use for your external conductor. Belden 8669 braid makes for a nice outer conductor as it can sleeve the coax and also can be attached with a standard ferrule.



THE 4:1 BALUN TRANSFORMER

The overwhelming majority of times in which a balun transformer is needed it is needed to convert 300 ohm balanced to 75 ohm unbalanced. To make this conversion with just a piece of coax is easily done. A piece of coax is cut ½ wavelength long and the center conductor is attached to both terminals. The coax to be used as the transmission line has its' center conductor attached to one terminal. The shield from the transmission line and the shield at each end of the ½ wavelength piece now are all tied together. The resulting balun transformer appears as shown below and works quite well. It must be remembered to multiply your \(\frac{1}{2} \) wavelength measurement by the velocity factor of the coax used to assure proper operation.



TRAPS

Since I have been writing this column I think I have received more questions on traps than anything else. Traps are devices that get rid of very strong or very undesireable signals. Cheap traps like the ones described here have their limitations in that they usually take out alot broader of a range of frequencies than is desired or they do not get rid of the offending signal to a satisfactory degree. Even so, there arises a time in everyone's budget where the extremely cheap is where it's at.

The trap is made by fastening to your receiver terminals a piece of transmission line t wavelength long (again, take into account the velocity factor) and that's it! Of course make sure to leave your transmission line connected also. Also, just cut the 1/4 wave section off, DO NOT twist the wires at the loose end together. This filter can be used to trap out any frequency and I have seen it used extensively in the Atlanta, MI area to trap out the local channel 6 with great success. For an example let's say we want to trap out channel 15. Taking 479Mhz as center channel, we divide 2952 by 479 and get 6.6 inches. Let's say we've got some Belden 8230 lying around so we multiply the 6.6 by 80% (the velocity factor) and get 4.925 or 4 15/16 inches. We cut a piece that long & hook it up to the Uhf terminals right along with our transmission line or balun.

NEXT MONTH

We'll wrap up transmission lines with a look at some of the different product available. Also a comparison of some of the balun transformers which are currently available and a public denouncement of the DX Labs P-22 Extractor. Until then, have a good one.

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PA Philadelphia; ch. 35; Community TV of

UT Salt Lake City; ch. 13; American Television of Utah. Inc. R Jayuya; ch. 26; Ana G. Mendez Educational Foundation (application returned) PPLICATIONS TO MODIFY CONSTRUCTION PERMITS OR NEW TELEVISION STATIONS 6 3000 1994 KY Danville: WDKY-TV 6 2525 837 NC Burlington; WRDG 9 1657 652 WI Marshfield; WWTL ONSTRUCTION PERMIT MODIFICATIONS GRANTED OR NEW TELEVISION STATIONS 3 3088 722 FL Fort Walton Beach; WPAN 2 647 835 GA Toccoa; WNEG-TV 9 2350 992 IN Indianapolis: WPDS-TV O n.c. 942 PR San Juan: WRWR-TV PPLICATIONS TO CHANGE EXISTING FACILITIES: TATIONS ALREADY ON THE AIR 3 316 970 IN Indianapolis: WTHR (CP MOD) 5 802 752 KY Beattyville: WLJC-TV; change TL (CP) 35.5 2201 OR Klamath Falls; KOTI (CP MOD) ACILITIES CHANGES GRANTED BY THE FCC A Los Angeles; ch. 9; KHJ-TV; ERP to decrease from 162 kw to 141 kw max. directional (the max. figure is determined for the proposed direction of the signal whenever the antenna is directional). 3184' AAT/423' AG/6135' ASL (same TL, but about 206 higher). Should be no detectable change in coverage area. (CP MOD) A Sacramento; ch. 3; KCRA-TV; no change in ERP. 1940' AAT/1951' AG/1951' ASL (I guess they plan to build the tower during low tide. Anyway, that's 403' higher than present transmitter); TL to 0.8 mile south of Twin Cities Road, adjacent to Snodgrass Slough (by definition, an area of deep mud, a real neat place to build a 1951! high tower), 2.2 miles west of Hwy 5. Walnut Grove: coordinates 38015122"/1210 29'22" (0.86 miles northeast of present transmitter site) increased transmitter height should improve coverage, if it doesn't sink first. A Cedar Rapids-Waterloo; ch. 2; KGAN-TV; no change in ERP, but now directional. 1430! AAT/1299' AG (ASL not available, but about 56' drop in elevation); same TL. If anything, the signal will be slightly weaker, but barely detectable difference. K Amarillo; ch. 14; KJTV; ERP change from 126 kw max./113 kw hor. to 332 kw max. (will be directional instead of circular): 812' AAT/783' AC/4246' ASL; same TL, and probably same antenna height, though there seems to be a small discrepancy in antenna height figures. Power increase should improve coverage. (CP MOD) X Corpus Christi; ch. 16; KEDT; (eff. 11/20) ERP increased from 3160 kw max/975 kw hor to 1480 kw max, directional (significant

increase in the horizontal ERP). No

Coverage area should expand. (CP)

change in transmitter height or location.

TX Houston: ch. 2: KPRC-TV: Same ERP. but to be directional: 1930' AAT/1918' AG/ 1997' ASL (448' higher); TL 1.27 miles east of Missouri City boundary; 0.8 mile southeast of Route 2234; coordinates 29034'06"/95029'57" (0.79 mile north of present site). Increase of antenna

height should expand coverage area. (CPMOD) TX Houston; ch. 39; KHTV; ERP from 5000 kw max/1050 kw hor to 4000 kw max directional (significant increase in horizontal ERP); TL changes are identical to KPRC-TV, since they are presently using the same tower and are both proposing to use the same tower in their permits. The only difference is that right now KHTV is about the same height as KPRC-TV on the same tower, but KPRC-TV will be a few hundred feet higher than KHTV on the new tower. 1421' AAT/1408' AG/1485' ASL. Only 60 feet lower by sea lever reference, But increased horizontal ERP should improve coverage. (CP MOD)

WI Green Bay; ch. 26; WLRE; ERP increased from 93.3 kw to 2500 kw max.. directional. 1179' AAT/980' AG/1965' ASL; coordinates 44021'30"/87058'48". TL to Shirley Road at Ridgeview Road, Glenmore (3.51 miles SSE from previous site). (eff. 12/9/83; Bill Draeb observed improved signal from his area. CP MOD, granted a few weeks before it began operation. The original CP called for slightly greater ERP and a much higher tower. The new transmitter is actually 50' lower than the old one.)

CALL LETTER APPLICATIONS: NEW STATIONS

CH C.L. STATE/CITY/APPLICANT 18 KLJB

IA Davenport: Davenport Communications Limited Partnership MI Kalamazoo; Grand Valley State

52 WGVK Colleges

15 WWCW VI Christiansted-St. Croiz: W.C. White

WA Anacortes; Mount Baker Bo'g Co. 40 KPOL-TV AZ Tucson; J.P. Communications

CALL LETTERS GRANTED: NEW STATIONS 24 KCPM CA Chico; Superior Broadcasting 46 KIHS-TV CA Ontario KBSA (change)

35 WWTO-TV IL La Salle; Word TV, Inc. 4 KLBY KS Colby: KBOM (change)

24 KTDZ OR Portland; KTAH (change) 22 KTZZ WA Seattle: EABD (change)

CALL LETTERS GRANTED: STATIONS ON THE AIR 41 WMGT GA Macon; WCWB-TV 2 WKRN-TV TN Nashville: WMGE

CHANGES IN CITY IDENTIFICATION

FL Ocala; ch. 51; WBSP-TV, now identifying as Ocala-Gainesville.

FL Orlando; ch. 9; WFTV now identifying as Orlando-Daytona Beach-Melbourne.

NJ Wildwood; ch. 40; WAAT-TV, which had previously been granted approval to include West Atlantic Sity in its identification under the old FCC rules, is now identifying as Wildwood-Atlantic City since those rules have been deleted. More on those rules later.

CHANGES IN THE TABLE OF ASSIGNMENTS XY Morehead: add 67- (correction from last month, which had 67z)

AR Al Dorado: add *34+

CA Paradise: add 46z

GA Banbridge: add 49z

KY Owensboro: add 61+

KY West Liberty: add 59z NC Andrews: change *59z to *59-

NC Relmont: add 46+ (Site restriction 5.8 miles west of Belmont to avoid shortspacing to WTVI. ch. 42, Charlotte, NC)

OK Elk City: add 31z

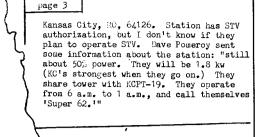
SC Rock Hill: change *55- to 55- (Educational station WNSC-TV operates on channel 30. a commercial assignment, thus depriving Rock Hill of any available commercial station. York County Television Corp had filed an application for a new station on channel 30, mutually exclusive with the application for renewal of the license of WNSC-TV. Since there were no other applications for channel 30. York now has cutoff protection, meaning that no other applications for channel 30 will be accepted by the FCC. Palmetto Broadcasting Systems, Inc., which owns WAGL(AM) in Rock Hill, requested the FCC to change the commercial reservation from 55 to 30, thus making channel 55 available for commercial use. But York contended that, if the change be granted, that its application be modified to specify channel 55, and that it continue to have cutoff protection against other applications. Palmetto in turn told the FCC that the channel 30 hearing and Work's status as a potential applicant for ch. 55 be treated as two different issues. The FCC decided to leave channel 30 as a commercial assignment and delete the noncommercial reservation of ch. 55. York will then be permitted to modify its application to specify ch. 55 without cutoff protection, or continue trying for channel 30 against WSNC-TV, with cutoff protection.)

IN Livingston: add 60- (Site restriction 1.7) miles north of Livingston to avoid shortspacing to a construction permit for Gadsden, AL.)

TX Tyler: add 60z (Dennis H. Owen originally applied for ch. 57, but that would be short-spaced to an earlier proposal to assign ch. 56 in Hacksonville, TX. But KLMG-TV. ch. 51 in neighboring Longview. raised objections about Ocen's veravity and Tyler's ability to support another commercial station. The FCC, however, replied that the issues raised by KLWG-TV are issues pertaining to an application to construct a television station, not issues relevant to the assignment of a channel. and thus ignored KLMG's opposition.)

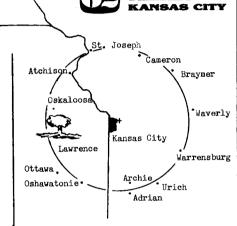
STATIONS ON THE AIR

O Mansas City; cn. 62; Mand-rV went on the air 12/7/1983. 1868 kw max/110 kw hor: 1120' AAT/1225' AG/2049' ASL: Coordinates 39°04'59"/94°25'49"; TL 21st Street Stark Avenue, Mansas City. Address: Media Central, Inc., 2111 Blue Summit Drive,



THLEVISION

NEWS



TX Austin: ch. 42; KBVO-TV went on the air December 4, 1983. 2510 kw Max/720 kw hor: 1290' AAT/1311' AG/2049' ASL; coordinates 30019'19"/97048'06": TL 1.4 mile west of Austin. 0.8 mile northwest of Mount Larson (few hundred feet southeast of KVUE-TV tower); address: Austin Television, c/o Darrold G. Cannan, Jr., 503 City National Bank Building, Wichita Falls, TX. 76301. Independent station.

CONSOLUDATED HEARINGS

AL Tuscumbia; ch. 47; Powell Broadcasting Company; Kadd Communicating Corporation.

IL Urbana: ch. 27: Powell Broadcasting

Company: Metro Program Network, Inc. IN Kokomo; ch. 29; Henry C. McCall; B.G.S. Broadcasting. Inc.; Metro Program Net-

work. Inc.; Sanda Kay Broadcasting Co. IN Marion: ch. 23; Mississinewa Communications Corporation; Metro Program Network.

MA Greenfield: ch. 32: Access Telecasting; Greenfield Television, Ltd.; Solomon D. Atkins.

MS Magee; ch. 34; Magee Broadcasting Company; Wyatt-Clark Broadcasting.

MC Goldsboro; ch. 17; Group H Broadcasting Corporation; dayne Telecasters; Friendship Broadc'g, Limited Partnership.

FCC DROPS BILLES RELATING TO CALL LETTERS

The FCC eliminated several of its rules relating to call letters as another example of its deregulation policy. This action was intended to eliminate burdensome requirements amd simplify call letter procedures, eliminate proscriptions concerning conforming basic call letters (such as WCAU-AM, WCAU-FM, and WCAU-TV, all of which are in Philadelphia), reassignment of relinquished call letters in the same community, and the requirement that an applicant for call letters actually notify all broadcast stations within 35 miles. The FCC also decided that it will no longer be the forum for resolving call letter disputes.

The present call letter rules were compiled in 1973, and were based on numerous scattered policies, decisions, and public notices over the previous years. In May, 1983, the FCC published a Notice of Proposed Rule Making, in which it proposed the elimination of the rules mentioned above. (See the 6/83 VUD for more detail on the Notice.) Comments from the television industry and the general public were invited.

Those who submitted comments were unanimously opposed to the FCC's proposal to have call letter disputes resolved in local forums. They raised the fact that several courts could have jurisdiction in some cases, leading to inconsistent results. Also raised was the fact that the Communications Act requires the FCC to retain "full and unhampered" authority over call letter matters. The FCC, however, insisted that it will not burden itself with disputes. "...our present procedures resulted from an early concern with protecting stations from other stations using confusingly similar call letters. Today broadcasting is a mature and healthily comnetitive industry with significantly less need for any protectionist policies." Since the FCC will no longer handle disputes, the 30-day holding period before issuing call letters is no longer needed and will be eli-

The present rules for conforming call letters allow commonly owned stations in the same or adjoining communities to use the same call letters, with the -AM, -FM, or-TV suffix. The proposed rules, would allow, for example Westinghouse, owner of KYW-TV and KYW (AM), to use KYW-FM for any of its FM stations in the country, but it couldn't use the call letters for more than one TV. AM, or FM station. The FCC decided to adopt this new ruling.

WTBS used to be the call letters of an educational FM station in Cambridge, Massachusetts. When Ted Turner took over channel 17 in Atlanta, Georgia, it was WTCG. But in 1979 he offered WTBS 50,000 to give up its call letters: half when they give it up. and the other half if Turner could get the call letters for his Atlanta station. This is what is known as trafficking call letters. Present rules were designed to control trafficking by holding all requests for the relinquished call letters for 15 days, after which all

PLBRUARY, 1934

requests received would be treated equally. Under the new rules, call letters will be granted on a first-come-first-served basis. If more than one request for call letters are received on the same day, the applicant with the longest continuous period of broadcast service would be granted the letters.

There was some opposition to the FCC's proposal to drop the rule against issuing call letters to a station in the same commumity as the station that relinquished the letters within 180 days of the date the letters were relinquished. It had been suggested that the public could be confused by such a change as to what station they were listening to. resulting in a distortion of audience ratings. The FCC replied that it knows of no instance of public confusion. Seeing no purpose in retaining this rule, the FCC decided to drop it.

There are also rules prohibiting call letters which include the initials of a living page brief to the FCC that termed the Times former President of the United States, the existing President, of a government agency (KRMM, WCIA, WIRS, WFBI, etc.), and laws prohibiting call letters that are in bad taste. These are being eliminated. There was no opposition raised by commenters against their elimination. "The Commission should not be an arbiter in this area. Good taste is a concept for which standards have traditionally opposition. " been set and enforced by the local communities." (If you believe that, tell me what that big contraption is at Chicago's Civic Center Forum, and maybe I'll tell you about Philadelphia's famous Clothespin.) "We will therefore rely upon the broadcasters' responsiveness to, among other things, their communities' wishes (like Tulsa -wbf) and federal haw dealing with the broadcast of obscene. indecent and profane material (like the stuff STV stations are permitted to broadcast. -wbf) | flawed, submitted its own 'Call Letter to control the selection and use of call letters."

Commissioner James H. Quello disagreed with the other commissioners on this part. "The Commission should continue its policy of routinely reviewing call letter requests in order to ensure that the government does not issue a call sign that is either offensive to listeners or viewers or abusive toward any segment of the audience." "The majority opinion notes that the criminal law prohibition on broadcast of obscene, indecent, or profane language would apply to the selection of call signs, but this strict criminal standard is not appropriate for determining whether a symbol is suitable for government issue. For example, there is no indication under existing requiring at least 28 nours of conventional law that ethnic slurs would be covered by the statutory prohibition, but I think it is evident that the use of such a word in the official identification of a broadcast licensee would be improper."

the 12/31/83 salias sorning Sews that gives a clear indication of now time consuming a call letter dispute can be. Remember that the 200 just dropped a rule establishing a 180 day waiting period for call letters to be roused

in the same community, here's an issue where the television call letters fell out of use thirteen lears ago. "KDFU-TV (Channel A) gave up the call letters RRLD 13 years ago. low, though, the station is contending that 'serious public confusion' will result if etromedia. Inc. is allowed to change the call letters of KNBM-TV (Channel 33) to KRLD.

"Metromedia, which owns KRLD-AM radio and became the owner of Channel 33 on Dec. 16. asked the Federal Communications Commission Oct. 20 for the call-letter change.

"The Times Mirror Company, owner of Channel 4. asked the FCC to refuse Metromedia's request in a nine-page petition dated Nov. 30, just one day before the regulatory commission officially stopped refereeing call-letter disputes." (Actually, the rules were adopted December 1, but aren't effective until January 20, 1984. -wbf)

Metromedia replied on Dec. 13, with a 49firror action 'frivolous.'"

"'If Channel 33 becomes a more meaningful marketplace competitor, Times Mirror's bloated share of viewing might suffer a slight decline. Metromedia said. 'In short, Times irror is simply attempting to protect its domination of the Dallas media market. The public interest has nothing to do with its

"In its octition to the FCC. Times Mirror included the results of a survey it commissioned from Southwest Research Incorporated. Three hundred 'randomly chosen' Dallas-Fort Worth residents were asked. 'Is there currently a television station in Dallas, Texas, that uses the call letters KRLD2'"

"According to the Times Mirror, 45 percent of respondents answered yes ... " "Metromedia, termining the Times Mirror survey 'seriously Awareness Study ... found that 96 percent of respondents 'think of television stations in terms of channel numbers rather than call letters." "In Metromedia's survey, only 1.66 percent of respondents named KRLD as the call letters of an area TV station." (That's five out of three hundred)

Perhaps now you see why the FCC wants out of the dispute resolving business. More of the Dallas station will appear under FORUM.

MORE DER GULATION: SUBSCRIPTION TELEWISION Back in 1982, the FCC took action on five of the six issues raised with respect to rules governing subscription television. The FGC eliminated the one-to-a-community rule. the "complement of four" rule, the rule programming each week, prohibition on the sale of decoders, and ascertainment of community needs and interests. The last issue. which was not resolved at that time. dealt with STV's imability to meet technical stanu-Charles deorge sent me a timely article from ards for conventional television. In its latest action, the FUC ruled that DTV stations may operate at variance with convention al standards, and also climinated existing application regularments for suggeristion

television operation and substituted a simple motification procedure.

Existing technical standards had addressed the problems of interference potential and signal quality of STV systems. None of the STV systems existing today has been able to comply with these standards. The greatest problem has been with audio performance: STV signals exhibit either more noise than conventional signals or reduced frequency response. Because of this inability to comply, all STV stations operate under a program test authorization (PTA). Designing decoders to correct the audio response problem would add more expense to a STV system, creating a greater financial burden on the STV industry. Commenting parties to the FCC noted that there are no complaints by subscribers of interference or poor reception.

Application requirements meant that STV applicants must supply large amount of information about operations, programming, and financing.

FCC the only application requirements imposed area or signal strength, and distances from on STV licensees is the identification of the present transmitter site to the new site are STV system to be used, and an indication that strictly my own calculations based on comparthat particular system had been approved by the FCC. Rather than requiring a specific application for STV authorization, the FCC decided that any television station may begin subscription operation simply by notifying the FCC within ten days of commencement. As far as compliance with TV reception criteria, the FCC decided to permit all STV stations, old and new, to operate with signal quality standards no more stringent than the technical systems already given approval by the FCC.

FORUM

This isn't meant to be a plug for the USA Today newspaper, but I often find news of a local nature regarding television stations in other states. From the 12/19/83 issue, an article stating that the Merrimack, NH applicant for channel 60 (Golden Triangle, which received a construction permit last fall) could be on the air as early as late July, 1984. They are trying for network affiliation, but may operate as an independent station. The 1/5/84 issue has an article on stereo TV.NTTW-TV, the noncommercial station in Chicago has been broadcasting stereo since last November, even though nobody in Chicago can receive the stereo. The broadcasts are experimental. The FCC is expected to decide this spring whether or not to authorize stereo broadcasting and to adopt a technical standard. Television stations will also be able to use stereo audio signals for teletext signals. The popularity of stereo simuleasting (proadcasting a concert or opera very timely for the report on call letter over conventional television and FM stations simultaneously, using the FM stereo station instead of the television station's audio.) indicates that stereo television will be in demand.

There are a few areas where I would like to see more contributions from the membership.

Perhaps the greatest need will be in the area of multiple city identification, since the new FCC ruling allows stations to add or change cities at will. The only requirement is that the community of license must be listed first. Two particular cases I noticed myself of stations taking this freedom are WPMT. channel 43. York, PA, which added Harrisburg, Lancaster and Lebanon to its identification without FCC approval. and WAAT, channel 40 in Wildwood, which was given approval to add West Atlantic City to its identification. Now they identify as Wildwood-Atlantic City. One station in the Tidewater area of Virginia wanted to add about seven communities to its identification: I guess they can do that now. But from now on I will have to depend entirely on my own and membership contributions for multiple city identifications.

Another weak area has been changes granted in existing facilities. Very seldom do I learn when changes actually take place. My references rarely make note of these changes. Under the new rules just established by the The references given to changes in coverage ison of old and new data. I would like to see members looking out for these changes. letting me know when changes do occur, and telling me how reception has changed. Case in point: WBFF-TV, channel 45 in Baltimore, has a construction permit to change from 5000 kw to 3925 kw max. Although I never found record of that change having taken place. I have noticed that their signal from Bridgeton has been much weaker than it used to be-

> A third area that I would like to see improvement in is information on stations that recently went on the air. Response from those stations to requests for information vary from fabulous to terrible. If you have read my writeups on the stations, you know what information I am looking for. Look for information in your newspapers.

> A fourth area where I would like to see more involvement, not necessarily what I consider a weak area in this column, deals with the printing of logos. Many members in the club collect them, save them, and like to see them printed in the VUD. Which is good for filling in those sometimes unavoidable blank spaces. Since this is a television news column, my policy had been to add logos only with respect to a new station, change in call letters, or a newly designed logo, or an old logo connected with a station about which I am writing an article. So feel free to send in logos that would relate to one of those categories.

The article sent in by Charles George was disputes, but it went on to add more information about the Hetromedia station beyond the subject of call letters. "Whatever the outcome of the dispute, it will be awhile before etromedia introduces its newest station to Dalla - Fort Worth viewers. Channel 33 currently broadcasts Spanish-Language programming from the Spanish International Betwork. Metromedia also owns TV stations in Houston. New York, Los Angeles, Boston, Chicago and Washington, D.C.

"Schonbak (general manager) and new program director William Castleman said it propably will be summertime before Channel 33 makes a full conversion. A few new programs might be onased in before then.

"I think that June or July is a safe bet for startup. Schonbak said.

"Channel 33 will retain 'some Spanish language programming! under Metromedia's ownership.... There also will be a latenight Spanish language newscast, 'but it's not going to be so late its a throwaway. ""

"The two Metromedia-owned stations will be combining resources, at least initially, to produce a prime-time local newscast. 'When it does happen, I guarantee you it will be first class, Castleman said of Channel 33's newscast. 'In news, you either do it or you don't. There's no in-between. I'm surprised casting on 12/19/83 (but what was it broadthat news is not a part of the formats of the casting during the past year?) and features other independent stations.

"... Metromedia productions will bring a substantial amount of first-run programming to Channel 33...."

Dave Pomeroy from KTWU in Topeka, Kansas, sent a few articles of interest. K42AB. the SIN translator in Austin, Texas, will be switching to channel 30 and become K30AK. It will continue operating at 1 kw TPO from atop the former KASE (FM) tower west of Trail of the Madrones Road. The article also describes SIN as 21 yearsold, and reaching 86% of the United States Hispanic population.

A news clipping reported that the FCC had set up a consolidated hearing issue for the two applicants of channel 43 in Topeka, Kansas: Arapahoe Silent Majority and Channel 43, Inc. The article said it could take up to six months before a decision was made, but Dave added that Arapahoe Silent Hajority recently withdrew its application, so a construction permit should be granted soon.

KTWU. ch. 11 in Topcka, should have its channel 26 translator in Moran, Kansas, operating soon (1 kw TPO, 500' AG), possibly as early as Harch.

Dave also speaks up on a perennial problem to M'ers:interference from cable television systems. He has to call the local cable company two or three times a year, but he says they take care of the problem. I have to call them myself once in a while; good thing I'm not a customer, or they would charge me for the visits. They've had to specify non-customer status on their work orders when the crew comes around. .ave sent a copy of section 76.613(b), which reads, "The operator of a caple television system that causes harmful interference shall promptly take appropriate measures to elimimate the naraful interference." But the paragraph above it defines naraful interfince as, "any emission, radiation, or inquetion which endangers the functioning of a rull navigation service or of other afet, services or seriously degraces, obstructs or rejeated or hard to cate, irrespective of its proly interrupts a radiocommunications service

loperating in accordance with this chapter. The chapter in question deals with caole operations in the 108-136 Miz and 225-400 MHz bands. And so I ask this question: is there any FCC rule requiring cable companies to eliminate any interference to receivers? And I don't mean just "narmful interfereice." If cable radiation is wiping out a station about a hundred miles away, there is now way that can be termed harmful.

FEBRUARY, 1984

A quick note from George Mileon. WNDS, ch. 50 in New Hampshire. His mother's house, only ten miles away, can't get in the station. of the station's employees can't get the station in. They deny that there is any problem. It's not exactly a strong signal by any means (914 kw hor.), but I would expect something better than that.

Rich Turcsany sent in several bits of news. W59AT. ch. 59 in Plainview, NY, is a new LPTV on the air, and definitely Steve Sprachman's mystery channel 59. It began regular telenothing but music videos, supplied by the Satellite Program Network. Rich reports a weak signa from Fairfield, CT, with interference from W59AA in New Haven. Two new stations on the air are WKCH-TV, ch. 43 in Knoxville and WPAN, ch. 53 in Fort Walton Beach. Florida. WTNH-TV, ch. 8 is now using dual city identification: New Haven-Hartford. WNOL-TV. ch. 38 in New Orleans, will go on the air 3/25/84 and air home games of Houston Astros and Texas Rangers. WULT-TV, channel 20 in New Orleans is also planning to go on the air in February. WMHT, ch. 21 in Concord, NH, is currently assembling a staff and will be or this year as an independent station. WPDS-TV. ch. 59, is also on the air, and plans a daily local music video show starting in January. KTTY-TV, ch. 69 in San Diego, plans to go on the air in March, 1984.NTTE, ch. 28 in Columbus. Ohio. which was scheduled to go on last October, now plans to go on the air 4/1/84. KTZZ. ch. 22 in Seattle, and KTDZ, ch. 24 in Portland, Oregon, should be on the air by now. with family-oriented and religious programs. and color episodes of Cisco Kid. MPWR-TV, ch. 60 in Aurora, IL, is expanding its hours now that "Sportsvision" STV service has folded. but they still share time with ABBS-TV in West Chicago. KIMT-TV, ch. 26 In Al Paso, Texas, will go on the air 2/84, with all Spanish programming, but will not be an affiliate of Silla

Thich suggested the idea of listing some of the syndicated programs that are being bought by new television stations, suggesting that it would be beneficial to the EKer in Logging a new station. Some of this information is available in magazines like ChCACCASTING, out I question if it would be of any use, and could take up auge amounts of listings before any would help identify a new station. I tonto shir away from listing actual programs carried by a station, except to help describe what type of station it is. A true Her is one who watches for stations which are distant gramming content. Histin, network affiliation

or educational status is about the extent to which I normally describe programming material or content. But one interesting note Rich mentioned was that ASTG-TV, channel 64 in Providence, RI, will be running syndicated programs of Magnum, P.I. The station is now owned by another company: Providence Television Limited Partnership, so apparently there will be some changes in the station.

Alan Hyams sent some information on that low nower station in Plainview. New York. W59AT is broadcasting "The Music Channel," an MTV type program from the Satellite Program Network, 21 hours a day. (But how long does this station expect to stay on the air with WTVU in New Haven expected to go on at any time?) He also says that the Uncle Floyd Show, contrary to my comments last month, does have rock bands on it. I did notice that a few times since then, but it's not a regular feature, apparently. I did read in a newspaper that the show does seem to be a hit on New Jersey Public Television. CA Novato: add 68z (site restriction 2.4 so it will probably stay on for a while.

Last month I raised the question as to whether or not Alaskan translator and low power stations should be listed in the upcoming translator list. Rod O'Connor, who is presently stationed in Hawaii, says he will betransferred to Kodiak, Alaska, in March. He was disappointed that the first translator list didn't include Alaska, and hopes that the next list will include it. After finishing last month's column. I came up with an idea: including all the Canadian repeaters, and possibly having two lists. The second list would be Canadian and Alaskan stations. Since the second list would probably be in less demand, I might be able to print smaller numbers myself at less cost, and reduce the cost of printing the first list by not including them in that list. Right now wy Canadian information stinks, and I wrote to the Canadian government for an updated list. Meanwhile I got notice from the National Technical Information Service that my account is now opened with them, and I just received order forms to order the microfiche. So I will be sending the order as soon as I finish this column. They say it should take 9 to 30 days before it comes. It's a good thing the Defense Tepartment doesn't act this slowly.

Dave lieman sent an article from the 1/5/84 Buffalo Tews. The FCC granted a permit to lestern Yew York Public Proadcasting Association to "activate" channel 23 in order to provide more educational programming to the Suffalo area. Well idon't believe it! "Ley actually called it a permit instead of a license. Tayoe the reporter Gidn't know how to spell license. Anyway. channel 23 will se using the same facilities han a dely, crannel if. Its schedule will offer reports of some of the more popular Pas programs already scheduled on Mill-TV, and new programming, such as inorityoriented, target-audience, and socally produces programs.

Fric Sundius, like several others, is looking for a list of HDS stations. That would be the MDS Data Book, which lists 4DS licensees and indicates which ones are transmitting television services, and what they are. I'm still looking. It is published by Paul Kagan Associates. I'm still trying to find out where to order it and how such it costs. As soon as I find out an thing I will let you know. If anybody reading this already knows, please tell me. Eric is receiving "Ga" Satellite Television from Los Angeles at his Santa Barbara residence, and occasionally picks up some co-channel interference.

Rill Draeb corrected me on the call letters of channel 36 in Charlotte, North Carolina, mentioned in a consolidated hearing last month. It should be MPCO. not MPCO.

CHANGES IN THE TABLE OF ASSIGNMENTS

These were just published in the Federal Register, si I thought i'd try to fit them in this month.

AL Mobile: add 61z

- miles northwest of Movato to avoid shortspacing to KTEM, ch. 54, San Jose, and applications for channel 66 in Vallejo.)
- KY Bowling Green: add 59+
- IL Charleston: add *51+
- NE McCook: add 16+
- TN Cleveland: add 53z (site restriction 9.7 miles southeast of Cleveland to avoid short-spacing to WMGB, ch. 53, Bowling Green. Kentucky.)
- FX Fort Worth: add 52-
- WA Morton: add 39z (site restriction 1 mile north of Morton to avoid short-specing to a construction permit for channel 24 in Portland, Oregon.

MORE FORUM

One more letter came just as I was about to mail this. It's from Mike Dorner in Metairie, Louisiana. Mike recently rejoined the WTFDA, and has been working up a list of vacant FM and TV channels. (More on that next month.) He gives some more information on television stations planning to start up in the near future. THUL-TV, ca. 38 in New Orleans, is expected to go on the air 3/25 with movies and syndicated programs; the transmitter is at Chalmette, Louisiana. WLAN-TV, ch. 32 in Lew Orleans, jointly owned by the Catholic Archdiocese of New Orleans and Mavier University, is also due on the air this spring, also transmitting from Chalmette. Lo word on when UULT-TV, ch. 20 in New Orleans, will go on the air.

Mike adds, "I have a list of antenna sites for most of the TV stations in east TX, south AL, far western FL, most of west TH, and all of NA. MI. and Am for those who want it. I' appreciate their sending we transmitter sites of stations in their area." also some ugdates: siNC-TV (cn. 26), s A-TV (ch. 4), and #35-TV (ch. 6) are all on 24 hours.

Fred McCormack Box 5221 State University Sta. Fargo, ND 58105

February 1984

Deadline: 3- 9-84

This month, a lot of Es for Pizzi, along with some nice tropo, and a super tropo opening for Kadet.

Jim Pizzi, P.O. Box 1778, Lovington, NM 88260 (505)-396-3251

MST

Equipment: Panasonic 12" b&w, Sony 8" b&w, Panasonic 13" color, Motorola 19" color, Finco P-7 with EU-4S at 70', CM 6' with EU-4S at 35', Winegard 2073 (channels 7-13) with AC-9730 preamplifier at 75', Winegard 2026 (channels 2-6) with AC-9260 preamplifier at 30', plus other antennas.

July 1983	30 Es 1848 unid 2 TRM net	1 Es 1800 XHTRMt 4 TR
25 Tr 2243 K38AP 38 TX 200	1849 XEZ 3 QR 840	1846 XEW t 2
(Memphis KAMR-4)	(KENW-3 off air)	1902 unid ch 2 Mexic
K40AL 40 TX 200	1851 XHJCM 4 AG 744	(Ment. Chiapas a lot.
(Memphis KVII-7)	(Canal 13 net)	(New ch 2 in Chiapas?
12338 K42AL 42 TX 200	1901 unid ch 3 Mexico	2000 unid ch 2 Mexic
(Memphis KFDA-10)	1911 unid 6 TRM net	(TRM - XHTRM Canal 2
(See comment #1)	1930 XHZ 5 QR 840	ID. Ch 22 is cabl
(200 00	1931 XEWO 2 JA 840	in Mexico City.)
November 1983	1937 KNXT 2 CA 855	2 Es 1418 unids 2-5 Mexic
26 Tr 0000 KWEX 41 TX 380	1942 KEYT 3 CA 945	1419 unid ch 4 TR
Austin 24,36 377	KNBC 4 CA 855	1420 unid 4 novell
0005 KHTV 39 TX 515	1945 KTLA 5 CA 855	unid ch 2 XE
0005 WTOGt 44 FL	(Went to FM)	1421 XHGE 5 YU 122
0012 KRIV 26 TX 515	2003 XHG 4 JA 840	(Canal 13 net
0046 KLAX 31 LA 644	2023 XEW 2 DF 960	1423 XHY 3 YU 120
0048 KCEN 6 TX 368	(Es gone by 2035)	1425 unid ch 6 YSNA?
0124 KTXH 20 TX 515	(See comment #3)	1535 WBRZ 2 LA 74
0129 KADN 15 LA 684		1540 WWL 4 LA 81
(ID-"The Alternative")	December 1983	1550 WKRG 5 AL 93
0136 WTOG 44 FL 1310	1 Tr 0919 @KBVO 42 TX 377	1551 WEAR 3 FL 95
MS 0200 WKRG 5 AL 936	(Austin)	1608 WCTV 6 FL 114
(See comment #2)	(See comment #4)	1628 WEDU 3 FL 130
Es 1849 unid ch 2 ne ABC	Es 1512 XEWO 2 JA 840	1631 WTVF 5 TN 96
(Es gone by 1859)	(Es gone by 1542)	1722 WCIA 3 IL 95
27 Es 1040 WFMYt 2 NC	1545 WEDUt 3 FL	1730 WBBM 2 IL 104
(Es gone by 1100)	(Es gone by 1558)	(Es gone by 1930
1801 KTVN 2 NV 1008	MS 1615 unid ch 2 ne	3 Es 1555 WBBM 2 IL 104
1802 KCRLt 4 NV	1714 WKABt 32 AL	1556 WKZOt 3 MI
(Es gone by 1830)	(1 sec strong 10 kHz -	1629 WEDUt 3 FL
29 Es 1942 KTVU 2 CA 1116		1631 unid ch 2 east
(Es gone by 2007)	only one possible.)	1657 WCIAt 3 IL
30 Es 1846 unids 2-5 Mexico	Es 1800 XHY 3 YU 1200	

Comment #1 (7-25) - Just got the December VUD - Going over Bill Fahber's "TV News" and discovered the above. I reported in the September VUD that the Strong City, Oklahoma translators had changed input signals. I had seen them several times before with Oklahoma City stations. I didn't know the Memphis translators were on their new, lower, channels. Previously on channels 77, 80, and 82.

Comment #2 (11-26)— A storm front was just to the north of here during this opening. All signals were weak and fadey. KADN and KLAX were in for about twenty minutes. WTOG was in and out for almost three hours (was gone around 0250 - front passing through). At times reaching a VAFI of 3225. Was monitoring KXAS when WKRG "popped" in at ID time. Was hoping trops would last a couple of hours longer - to try for other Florida U's signing on, but weather was unstable.

Comment #3 (11-30)- Tuned in on the middle of this one, which I believe was caused by the shuttle space lab experiment of a man-made aurora which was performed about an hour before tune/in. I'm very curious as to other DX'er's observations; and maybe, NASA might also be interested. Anyone with contacts at NASA? KENW-3 was off the air at tune/in, back on at 1927.

Comment #4 (12- 1)- Just opened a letter from Rick Samford of Burnet, Texas. He said

Western TV DX

February 1984

Pizzi (continued)

KBVO was running TP as of November 28 and for me to try and see them. Got them on the first try. Rick said they would begin regular broadcast at 1830 CST on December 4.

I really believe that Es on 11/30, 12/1, 12/2, and 12/3 was induced by the space lab experiments. I watched the whole mission on Satcom F1R. NASA broadcast all STS flights, so I monitored that particular experiment, and sure enough within an hour to an hour and a half - Es. Maybe, just a coincidence? I'll be checking those dates in the VUD for other reports of Es. Best of DX, 73's, Jim

Jeff Kadet, Box 20, Macomb, IL 61455

CLT?

Equipment: Zenith N1310, Channel Master Super Diamond Quantum up 18' with EU-4S preamplifier and RG-11 cable. Zenith 9" black and white, Stereo Probe 9 at 28'.

December 1983					
	24 IL <u>73</u> 12	Tr 1756 KAUT	43 OK 510	12 Tr 2035	KLPA 25 LA 645
(Moli:	ne)	(Almost snow	free color)		(Parallel- KLTL)
12 Tr 1736 <u>KGMC</u>			25 OK 510		Arkansas 24, 29
(Almost snow				30 Tr 0635	KHNE 29 NE 410
	23, 41	1802 KEKR	62 MO 235	0800	LaCrosse 19, 31
(Snowi	free)	(Kansas City	- new sta-		(Over Peoria)
	14 OK 510		per 62")		(No sign of WQOW)
(Weak	est of OKC)	2003 KLTL	18 LA 725	31 Tr 0150	WLS 7 IL 175

WQPT is a new semi-local. Signal is pretty crummy; sometimes going into deep fades with the antenna pointed right at them.

I don't know what time the 12/12 opening began, but it was the most distant trops seen here yet. If I hadn't turned on Dan Rather at 1730 on the Sony in the living room and seen lines under channel 7, I wouldn't have even known the opening occurred. The night before, I was FM DX'ing for MS and trops was nil.

Also, note the antenna height. A few weeks earlier, there was a severe wind and ice storm, and I lowered the telescopic mast to 18'. I was going to take down the UHF antenna and put up a ham beam for the winter, but I never got to it.

As a suggestion, perhaps the new TV logbook can have state pages for TV stations similar to the Elving Atlas. Bill Draeb has a wall sized map of the US with all of the UHF stations listed, and a map like that would be the ultimate, but pages would be almost as good. Also, I recommend the binding on the new logbook be on the left side so that it will be easier to flip through.

Lately, I've been taking pictures of TV DX with Kodak's new ASA 400 color print film. It seems to give better results than Tri-X.

Oh yes, the above reception of Oklahoma City is the first time I've had traces of any of them here. The opening seemed to bypass both Dallas and Houston; as I was watching channel 39 closely. Also, Louisiana is another state on UHF but not FM trops yet.

One last note, K40AI can be a real pest here at times. They often have MTV or aerobics type programs with many local ID's ("The Voice of the Thousand Hills") and Ronco type ads. In the ads, they usually give Tulsa or Kirksville mailing addresses. Totals are now at 169 stations with 25 lo-band, 28 hi-band, and 116 UHF. 73

Fred McCormack, 135 Prairiewood Drive, Fargo, ND 58103

CST

Equipment: VHF: Broadmoor 9" black & white, Winegard CH-7078; UHF: Magnavox 19" color, Winegard CH-9095, Blonder-Tongue CMA-Uc pre-amp; Alliance rotor.

December 1983	12 MS 2200	WJBK	2 MI	730	30 Tr 0900	WXOW	19(MN)	340
11 Es 1658 unid channel 2	30 Tr 0858						28 WI	
12 Es 1725 unid channel 2	0859	KAVT	15 MN	290				

Another dismal month for TV DX. I saw a few minutes of weak Es, but nothing to make even a tentative ID with. Saw some strong meteor bursting at times, but I have never seriously attempted to DX that mode in Fargo due to the smallness of my antenna. Since moving to Fargo, I have only ID'd meteor bursts twice, and wouldn't you know; both times, the station was WJBK. Tropo on December 30 was nothing dramatic, although signals were good - far above normal.



Dave Nieman 12284 Nice Rd. Akron, NY 14001 February 1984

PHOTO-NEWS

February 1984

Kewaunee WI 54216

William J. Draeb

Ellis St. R.R.#2

Deadline: 1st

Not much DX activity during the past month and as a result only one report received. Hopefully conditions will improve.

Robert Grant, 5775 Bishop, Detroit, MI 48224 EDT-EST

EASTERN TV-DX

September 1983 + Tr 0600 CKNC-9 ON 300

December 1983 11 Es 0030 CEWFT-3t MB 0412 CKTV-2-6t SK 0510 CJFB-3-3t SK (xlting WMAQ-511)

December 1983 11 Es 0545 CJFB-3-3t SK (xlting WEWS-511) 0630 CKTV-2 SK*

* = over locals

(super rare) WKEW-7 NY 200*

November 1983 13 Es 2000 WEDU-3t FL 2015 KRTX-3 TX

Es sure has it's surprises, doesn't it. How's that for a phantom translator? I can't even count this logging for anything. But it is fun to think that MEMS's signal traveled 1000-1300 miles by Es, worked it's way through the full power repeater (which is most likely CJFB-3-3 in Ameroid, SK although it could be CFSS in Warmley, SK, both repeat ch. 5's) and bounced back to my antenna only about 100 miles from where it originated. You could say I got a double hep from Cleveland, hi! I could easily see the transmitter carrier switch on and off as WEWS faded in and out at the unid repeater site. The transmitter being on the air only when WEWS was strong enough to break the squelch of the repeater. When I saw the WMAQ I.D. slide I didn't know it because I thought I had simply misread the picture on the screen. Nothing was seen of this transmitter (there was another ch. 3 Es at the time with a multiburst resolution card that was much stronger on average than this unided phantom xltr I've been talking about.) until WEWS's 3/4 CEP w/I.D. came on about 0545.

I wish i was on the other end of this Es opening (that is, where most locals were off and many DX stations from the Great Lakes coming in the clear, and a local station retransmitting the DX, not vice-versa, hil)

This might be the start of a new menace in DX confusion during Es openings to Canada. Just remember that when you see an Eastern USA ch. 5 with your antenna aimed at the Canadian Praries and your tuner on ch.3, it doesn't mean there is something wicked in your water supply., hi!

(Robert; I saw generally the same thing here. I turned the set on at 0356 and found CKTV-2 booming in. I had planned on doing a bit of Ms DKing (Geminids shower) but changed my mind when I saw all the Es. WBAY-2 was off because they arn't on all night on weekends so, no locals to contend with. On ch. 3 I found WEWS and WNEM (no sign of WMAQ). To me it looked like both of these ch.5 stations were being repeated by separate ch.3 repeaters. I also saw and I.D.ed CFQC-1-3 in Strangar, SK and CKTV-2-6 in Willow Bunch, SK. There was another ch.2 station on under CKTV and was either a + or - offset. The program was about Eskimos and how they lived. CKTV had a movie which ended about 0408 which was followed by "The Waltons". Also seen were numerous color bar patterns all the way through ch.6 (with no calls, of course). Some were probably from Alberta .- wd)





WMAQ-AM670 WKQX-FM101.1 National Broadcasting Company, Inc. Merchandise Mart Plaza Ch-cigo IL 60654

I would like to start-off by thanking Mike Reid for the great job he has done as editor of Photo-News. Lets hope that his editing talent will not he lost to the VHF-UHF Digest for long.

As the new editor of Photo-News, it will still be this columns policy not to return photos that are submitted to it.



KTVU-2 Oakland, CA 1116 mi. Es (JP)



KGAN-2 Cedar Rapids, IA E-skip 1983



WFIE-14 Evansville, IN 375 mi. Tr Aug. 31, 1983

THE TO GENERAL TA

EWANTEN ILLE INTOTANA



KTCI-17 St. Paul-Minneapolis. MN 235 mi. Tr Aug. 19, 1983 (NE)



------WLFI-18 Lafayette, IN 200 mi. Tr Aug. 1, 1983 (NR) (NE)

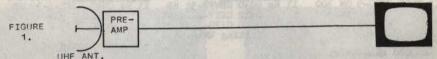
> This months photos were from, Jim Pizzi (JP), Lovington, NM Nate Ely (NE), Madison, WI many thanks.

> > Dave

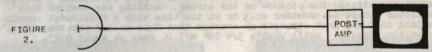
VIDEO LINES

Rill Thompson 1907 Seneca Street Buffalo, NY 14210

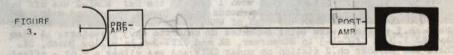
Most avid UHF TV DX enthusiasts know that you need to have a low-noise preamplifier in the antenna system to get good results. In order to really work well, we also know that it must be mounted as close to the DX antenna as possible. But many of us have also found out that even if it is located right behind the DX set, it will still improve system performance. Of course, this is because the noise figure of a good modern low-noise UHF TV pramo is so much lower than the noise figure of even the best TV tuner. Most conventional TV DX ing systems for UHF therefore end up looking like the configuration presented in figure 1.



One useful piece of equipment that almost every TV DXer overlooks is the nost-amn. Rasically, a post-amo is a low-noise amplifier, like a preamp. However, there is no point in having high gain in a post-amn, since it is used just before the TV set. Thus, a post-amp will often have a gain of less than 10 dB. High gain is needed primarily to overcome transmission line loss. It is the noise figure that establishes important weak-signal resnonse. If for some reason you cannot use a preamp at your UHF terminals, a post-amp in the system, as in figure 2, will still give you improved results. Even with a mediocre UHF antenna, dramatic improvements are still possible. That's because most of the snow you see in a weak UHF signal is actually the result of your UHF tuner.



In practice, a post-amp is what you will find in a catalog listed as a "distribution amplifier." Very few models were intended for high performance at IHF, with one notable excention. Winegard's DA-405, a IHF only model, is probably the best post-amp on the market, with a noise figure averaging about 3.2 dB. It has a very good band separator, allowing it to be used with an all-channel antenna. If you're trying to DX with an all-channel antenna and cannot use a mast-mounted preamp, this unit may be exactly what you need to get decent IHF DX results. It should perform fairly well under local overload conditions; according to the specs, its maximum input per channel is 23 dBmV; excellent for such a device.



What about using it in conjunction with a gream, as in figure 3? This might work for those who would like a decent amplified solitter (vou would have to provide a hybrid MATV solitter at the output of the post-amp) to feed two DX sets. If you have ever tried to solit weak IHF signals with an unamplified solitter, you know what kind of problems they cause at IHF. The typical MATV massive solitter (hybrid type) gives you 4 to 6 dR of loss at each output—unaccentable for good DX results!

In practice, using a postamp in a system that also uses a preamp does not give the kind of large improvements in weak-signal performance one might expect to see, due to the fact that the overall system performance is really mostly determined by the noise figure of the preamp up at the antenna terminals. In fact, if such a system is used with moderately strong "HF local signals present, the results can be a disaster for CXing--all kinds of overload effects will appear in places where they never were before.

Don't overlook the mossibility of using a most-amm. Right now, the Winemard model is about the only one I could recommend for Oyers. I'd like to hear from anyone who has discovered anything that works better. 73s!

WTFDA CLUB SUPPLIES



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		ONLY A FEW ARE LEFT ORDER NOW!!!	\$6.00
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STATION BREAK

P.O. Box 514 Buffalo, NY 14205

WTFDA member ads only. 3 line or 30 word limit.

FOR SALF - VIU back issues; "ay '72, May '73, Aug. '73, Nov. - Dec. '73, Feb. '75, Feb. - Mar. '76, June '76, Feb. '77, Apr. - Dec. '77, Jan. - Jun. '78, \$1.00 each. M. Hollis, 102 Star St., Enterprise AL 36330

FOR SALE OR TRADE - Collector's item--antique TV video preamplifier made by RMS. Inc. Bill Smith, Brown Terrace, Uxtridge, MA 01569

FOR SALE - Sherwood Dicro CPU Tuner w/display of call letters, presets, etc. w/box, manual; excellent condition. List \$2,000. \$395 firm. Mark Uhryk, R.D. I, Lost Hollow Pd., Dillsburg, PA 17019, (717) 432-9433 evenings,